Boosting Quality Through Ranking of Universities in Nigeria

Peter A. Okebukola
Chairman, Nigeria National Universities Ranking Advisory Committee and member, CIQG Advisory Board

Introduction

Nigeria with 218 universities enrolling 2.6 million students, has the most expansive university system in Africa. External quality assurance is vested by law on the National Universities Commission (NUC) and some professional bodies. Established in 1962, NUC is the oldest national quality assurance agency in Africa. By 1992, it emerged one of the trailblazers in the establishment of minimum academic standards for all universities in the country.

The pursuit of NUC’s quality assurance mandate has three major pillars. First is accreditation during which programmes and institutions are measured against minimum academic standards. Second is inspection and monitoring which are conducted to ensure institutions do not regress from maintaining academic standards between accreditation seasons. Third is ranking which measures each university on quality indicators with a view to stimulating competition and boosting quality as a collateral benefit.

In 2001, Nigeria, through the National Universities Commission (NUC), instituted a ranking mechanism that was aimed at fostering competition and stimulating quality (Okebukola, 2013). The experiment worked. The universities that led the pack during the first two years, yielded places to others that made efforts to improve their performance in the metrics. By 2006, the healthy competition translated to overall hike in performance on the ranking indicators.

A distinctive feature of the Nigerian model of university ranking, the first in Africa, was the use of a composite indicator- academic quality index, derived from scores on program accreditation. Since program accreditation is multidimensional with measures including quality of staff, curriculum, facilities, curriculum delivery, fundings and employers’ rating, the index served to represent the global quality profile of the university. By 2006, the indicator base of the ranking was expanded to reflect changes in the measure of quality in the Nigerian and global university systems over time.

After the 2002 early lead by the Nigerian ranking system, global players entered the space. In 2003, the first Shanghai Jiao Tong University’s Academic Ranking of World Universities was published. Times Higher Education and QS published their first rankings in 2004. This was followed in 2005 by Webometrics rankings. In 2021, AD-Scientific ranking joined the global efforts in ranking universities. In May 2022, several other rankers and variants of ranking have emerged.

Establishment of institutional ranking committees

In January 2022, every university was required to set up its institutional ranking committee. The University Ranking Committee (URC) is chaired by the deputy vice-chancellor in charge of research. It has as members, director of academic planning, director of ICT and representatives of each faculty in the university. In a sense, the URC is a complement to the entity that is responsible for institutional quality assurance. Working with the directorate of quality assurance URC uses ranking indicators approved at the national level to rank departments and faculties in the university, thus stimulating competition. Improved performance induced by such competition is expected to reflect in better ranking of the university.
The first order of business of the URC was to develop strategic plans. The plans had goals with targets to raise the rank of the university within the next five years, to much higher than present standing. The costs of implementing the plan which include improved resourcing especially for research and for capacity building are estimated. The proprietor and council of the university make commitment to, as much as possible, provide the needed funds.

The upside and downside of ranking on quality of higher education in Nigeria

Institutional introspection is one of the immediate responses when ranking league tables are published. How and why did we perform so well or so badly is one of the questions in such introspection episodes. The product of such exercise is gap analysis. The management of the university then computes differentials in performance on each ranking indicator with those of universities above it on the league table. Pathways and strategies to bridge the gaps are identified and steps taken to implement such remediation as quickly as possible. These strategies include improvement in resourcing for teaching, learning and research, efficiency of management and curriculum delivery. Such improvements lead to incremental hike in quality.

The downside of ranking is when some vice-chancellors of universities that are low down in the league table, enter a low-moral mode and not keen in proving their standing on quality, based on ranking indicators. These “rankingphobic” university managers (Okebukola, 2017) are quick to label the national ranking as bogus. Interestingly, when their universities fare better on later rankings, the vice-chancellors are quick to applaud the ranking and cite their positions on the university website!

Case studies of quality improvement induced by ranking

The 2001 Nigerian university system ranking placed the oldest university in Nigeria (University of Ibadan) below Federal University of Agriculture, Abeokuta which emerged No. 1. University of Ibadan was resting and relying on its old glory and failed to see that quality on some of the ranking indicators had slid downward. Jolted by being beaten by a relatively newer university, the authorities took steps to remedy deficiencies that depressed their ranking. Facilities were improved, more staff were recruited and curriculum delivery improved. Within three years, the university climbed to the top of the national league table.

In 2003, Kogi State University had challenges with its ranking, descending very low on league tables. The Kogi State government that had been reticent in funding attention to its university had little choice after intense public pressure to release huge grants to the university for upgrading facilities for teaching and learning, recruiting more staff and hiring a new vice-chancellor and installing a new council. Within three years, Kogi State University bounced back to respectable position on national league tables.

Two recent cases are worth citing. These are Covenant University and Afe Babalola University. In 2003, the Board of Regents of Covenant University, Ota (founded in 2002), approved the strategic goal of being among the top 500 universities by 2020, a rather tall order for a university that was established 17 years to the target year. The board and the senate were not in doubt that what it will take to achieve the feat is massive investment that will translate to quality improvement. Annual proprietor grant to the university jumped to more than 800%. Focus was on strengthening institutional and human capacities for high quality research, building of ultramodern facilities for teaching (one of the best in Africa) and partnerships and linkages with top-class universities around the world, including engaging Nobel-prize winning scholars on its faculty. Before the 17-year target, Covenant University had achieved the feat and ranked among the top 400 universities on the Times Higher Education World University Rankings and among the top 200 on several indicators on the
Times Higher Education impact rankings. In May 2025, Covenant University graduates are among the best in Africa that are prepared for the world of work.

The case of Afe Babalola University (ABUAD) in using ranking to boost quality is particularly striking. Founded in 2009, the founder who, as chairman of council of University of Lagos, one of Nigeria’s oldest universities (established in 1962) was twice winner of the best chairman of Council award in the Nigerian university system, forecast that his private university will be among the best in the world in less than 20 years. He literally put his money where his mouth is by investing unprecedentedly in facilities for teaching, learning and research including having one of the best resourced medical schools in Africa. In April 2022, ABUAD emerged the No. 1 university in Nigeria in the Times Higher Education Impact Ranking and among the top 400 in the world. This feat was achieved in 13 years. Feedback from the university points to the decision of the board of trustees, council and senate to work assiduously towards being among the top 100 in the world by 2030.

Methodology of ranking Nigerian universities

The nationally-approved methodology for ranking Nigerian universities in 2021 will exemplify the process which has eight stages. **Stage 1:** Series of preparatory workshops with Directors of Academic Planning of Nigerian universities to prime the system for a re-invigorated ranking and build consensus on the methodology. One of the workshops benefitted from insights from officials of the Times Higher Education (THE) rankings. **Stage 2:** Consensus building and agreement on the 12 indicators for 2021 rankings. **Stage 3:** Setting up of an online platform for data entry. **Stage 4:** Validation of data entered by accredited officials of each university by teams of Directors of Academic Planning and cross validation with records with NUC (the regulator). This is regarded as the most important step in the process and noted to be unique in the history of national and global ranking of institutions. This process hiked the credibility of the process and plugged entries of rogue data. This raised the trust level of the 2021 rankings. **Stage 5:** Data analysis and internal review of results by the League of Directors of Academic Planning. Feedback from the review led to removal of bugs from the output. **Stage 6:** Approval of revised results by the League of Directors of Academic Planning. **Stage 7:** Approval of results by Vice-Chancellors. **Stage 8:** Launch by the Executive Secretary of NUC.

For the 2021 ranking, 12 indicators were agreed by national consensus of the league of Directors of Academic Planning and Vice-Chancellors. These are: Student-Teacher Ratio (aligned with 2022 THE ranking); percentage Female (aligned with 2022 THE ranking); percentage of full professors; percentage of international staff; percentage of international students (aligned with 2022 THE ranking); percentage of programmes with full accreditation; efficiency; ALL Citations Per Capita (aligned with 2021 AD-Scientific ranking); h-index per capita (aligned with 2021 AD-Scientific ranking); i10 index per capita (aligned with 2021 AD-Scientific ranking); Google Scholar Presence and contribution to knowledge economy (aligned with 2020 Knowledge Economy Index). The computations are:

- **Student-Teacher Ratio:** the number of full-time equivalent (FTE) students in the university divided by the number of full-time teachers in the institution.
- **Percentage Female:** This is calculated by dividing the number of female FTE students by the total FTE, expressed as a percentage.
- **Percentage of Full Professors:** This is a measure of the quality of staff and is calculated by dividing the total number of full professors in the university by the total number of full-time academic staff, expressed as a percentage.
- **Percentage of International Staff:** This is the proportion of the academic staff of the university who are non-Nigerians. It is designed to measure how well the university is able to
attract and retain expatriate staff. The indicator is important in a globalising world and within the context of a university being an institution with a universal framework of operations. It is computed by dividing the number of non-Nigerian teaching staff by the total number of academic staff in the university and expressing this as a percentage.

- **Percentage of International Students**: This is the proportion of the students in the university who are non-Nigerians. This indicator measures how well the university is able to attract foreign students. As stated for the staff component, the indicator is important in a globalising world and within the context of a university being a universal institution where students from all over the world are free to enrol in the university. It is derived as the percentage of the quotient obtained by dividing the number of non-Nigerian students in the university by the total number of students.

- **Percentage of Programmes with full accreditation**: This is to measure the overall academic standing of the university. It is computed by dividing the number of academic programmes of the university with full accreditation status by the total number of programmes offered by the university and expressing this as a percentage.

- **Efficiency**: This is measured as student completion rate which is a measure of the internal efficiency of the university. Efficiency (student completion rate) for 2020 is calculated by dividing the number of students who graduated in 2020 (for the cohort that enrolled in 2016) by the total number of students in the graduating class of 2020. The quotient is expressed as a percentage.

- **All Citations Per Capita**: This is a measure of average scholarly citations for the university as indexed in Google Scholar. It is calculated by summing the total Google Scholar citations for staff of the university who have Google Scholar presence and dividing by the number of such staff.

- **All h-index Per Capita**: This is another (complementary) measure of average scholarly citations for the university as indexed in Google Scholar. It is calculated by summing the total h-index citations for staff of the university who have Google Scholar presence and dividing by the number of such staff.

- **All i-10-index Per Capita**: This is another (complementary) measure of average scholarly citations for the university as indexed in Google Scholar. It is calculated by summing the total i-10-index citations for staff of the university who have Google Scholar presence and dividing by the number of such staff.

- **Google Scholar Presence**: This is the percentage of staff in the university with Google Scholar presence. It is calculated by dividing academic staff who are enrolled in Google Scholar by the total number of academic staff in the university, expressed as a percentage.

- **Contribution to Knowledge Economy**: Graduates produced by a university and research output from staff are key elements in the knowledge economy enterprise. This indicator is computed by adding efficiency scores (graduate output) and all three per capita Google scholar scores.

- **Total score**: This is summation of percentage of international staff, percentage of international students, all citations per capita, h-index per capita, i-10 index per capita and Google Scholar presence.

The 2022 ranking to be published in July 2022, consolidates on the 2021 edition with addition of seven indicators inclusive of those from the Times Higher Education World University Ranking and Webometrics ranking. The additional indicators are: percentage of students outside the state where the university is located; percentage of academic staff whose state of origin is outside the state where the university is located; percentage of students with on-campus accommodation; teaching quality (from accreditation data); quality of infrastructure (from accreditation data); community service/university’s contribution to government- 2020 and reputation.
Some woolly areas

Three metrics were found to be challenging in derivation of empirical data. These are quality of teaching, quality of community service and reputation. For instance, how do you get valid data on the quality of teaching without sitting in classes in the university? How do you quantify and validate data on community service offered by individual lecturers (faculty members) in the university and aggregate such data for the university? How do you measure reputation of the university from in-country administered questionnaires that may not produce biased data? These questions were addressed and resolved during two national workshops in April 2022.

For quality of teaching, it was resolved that the only valid and reliable data will be those obtained from onsite visits of subject experts. Happily, program accreditation instruments have a measure on quality of teaching. Accreditors are expected to observe (directly or indirectly), and score the quality of interaction in live classroom/workshop/laboratory sessions. A database of such scores exists at the National Universities Commission for all accredited programmes in the Nigerian university system. It is from this database that the scores on the quality of teaching were ingeniously sourced.

For community service, data were obtained from the comprehensive annual reports submitted by all universities for the year. Every year since 2017, NUC publishes the State of University Education in Nigeria (see for example, Rasheed, 2020). All universities report on their teaching, research and community service activities. They also provide current statistics on enrolment, graduation, staffing funding and facilities. A scoring scheme is used by a panel of experts to score the report on community service by each university. On reputation, data collected are from stakeholders that are not affiliated with the university.

Conclusion and the Road ahead

A quick view of the historical antecedents and current practice of ranking Nigerian universities was presented in this report. The link to quality improvement was explored. When the 2022 Times Higher Education World University Rankings were released which showed a respectable jump from two Nigerian universities in the world’s top rankings to six as a consequence of focused intervention on improving quality, the Nigerian government, in January 2022, represented by the National Universities Commission, established a national universities ranking advisory committee (NURAC). NURAC was to ensure that the efforts in improving quality does not wane and to translate to better ranking of Nigerian universities. Working with stakeholders, NURAC developed a 10-year strategic plan which will ensure that substantial resources are invested in the system. This is synced with the national blueprint (Rasheed Blueprint) on the rapid revitalisation of the Nigerian university system (2019-2023). Hopes are high that based on the heightened interest at the institutional and national levels to improve quality, Nigerian universities are well on course to improve their rankings on national, regional and global league tables.

References